## **ABSTRACT**

As the fuel cell apparatus of the present invention comprises a fuel cell for generating electricity by supplying a fuel pole with fuel gas and an oxidant pole with air, a washing liquid tank, disposed in a supply passage of the air, for reserving washing liquid, and a means for replacing the washing liquid reserved in said washing liquid tank, can supply the oxidant pole with air washed with the washing liquid, and replace the washing liquid periodically, allowing to supply the oxidant pole with always clean air. As it can supply the oxidant pole with clean reaction air not containing dust of inorganic or organic substance, volatile components of aromatics or paints, CO, NOx, SOx, cyanides, sulfates, aromatic compounds, ammonium or the other harmful substances exerting bad effects on the cell characteristics and prevent the alteration of electrolyte based on the chemical reaction between harmful substance and electrolyte, the reliability is high, the life is long life and the durability is high.